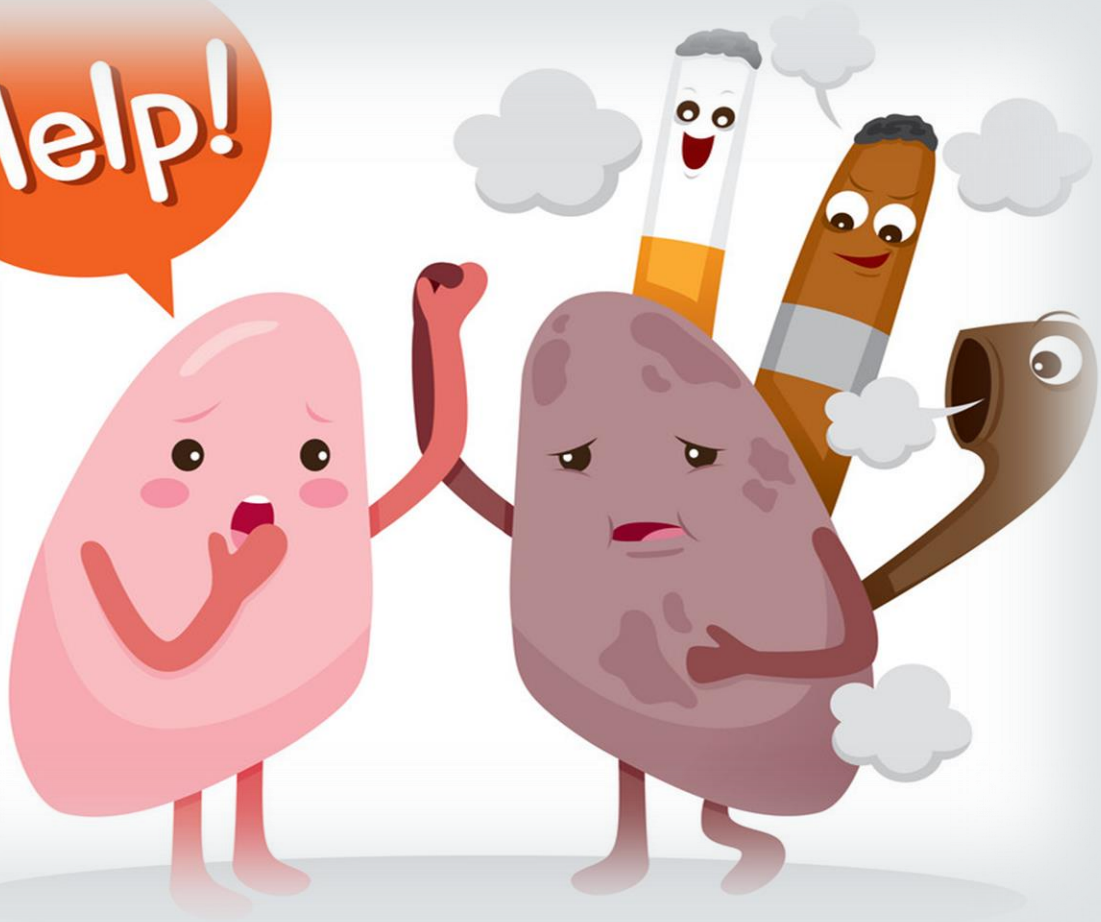




SMOKING AND SUBSTANCE ABUSE

SUPERVISED BY:
PROF. JAMAL ALJARALLAH

Help!



OBJECTIVES

1. Describe the Epidemiology of smoking in Saudi Arabia.
2. Recognize Risks of smoking (Mortality and Morbidity).
3. Appreciate the Effect of passive smoking on pregnancy, children... .
4. Be able to help the smoker to quit with smoking cessation aids and overcoming nicotine withdrawal symptoms.
5. Appreciate the role of PHC physician in “smoking cessation clinic”.
6. Discuss the smoking cessation medications, Nicotine preparations, Varenicline, Bupropion,
7. Recognize Factors that lead to substance abuse.
8. List types of substance abuse.
9. Appreciate Method to approach subjects with substance abuse.

MCQs

Q1) what is the prevalence of smoking in KSA ?

A.13% .

B.34% .

C.21% .

D.42% .

MCQs

Q2) How would you screen for substance abuse ?

- A. physical Examination
- B. single question screening
- C. blood samples
- D. Full history

MCQs

Q3) Children exposed to secondhand smoking during early life are at most risk for developing which of the following?

- A. lower respiratory tracts infections
- B. lung cancer
- C. cardio vascular disease
- D. migraine

MCQs

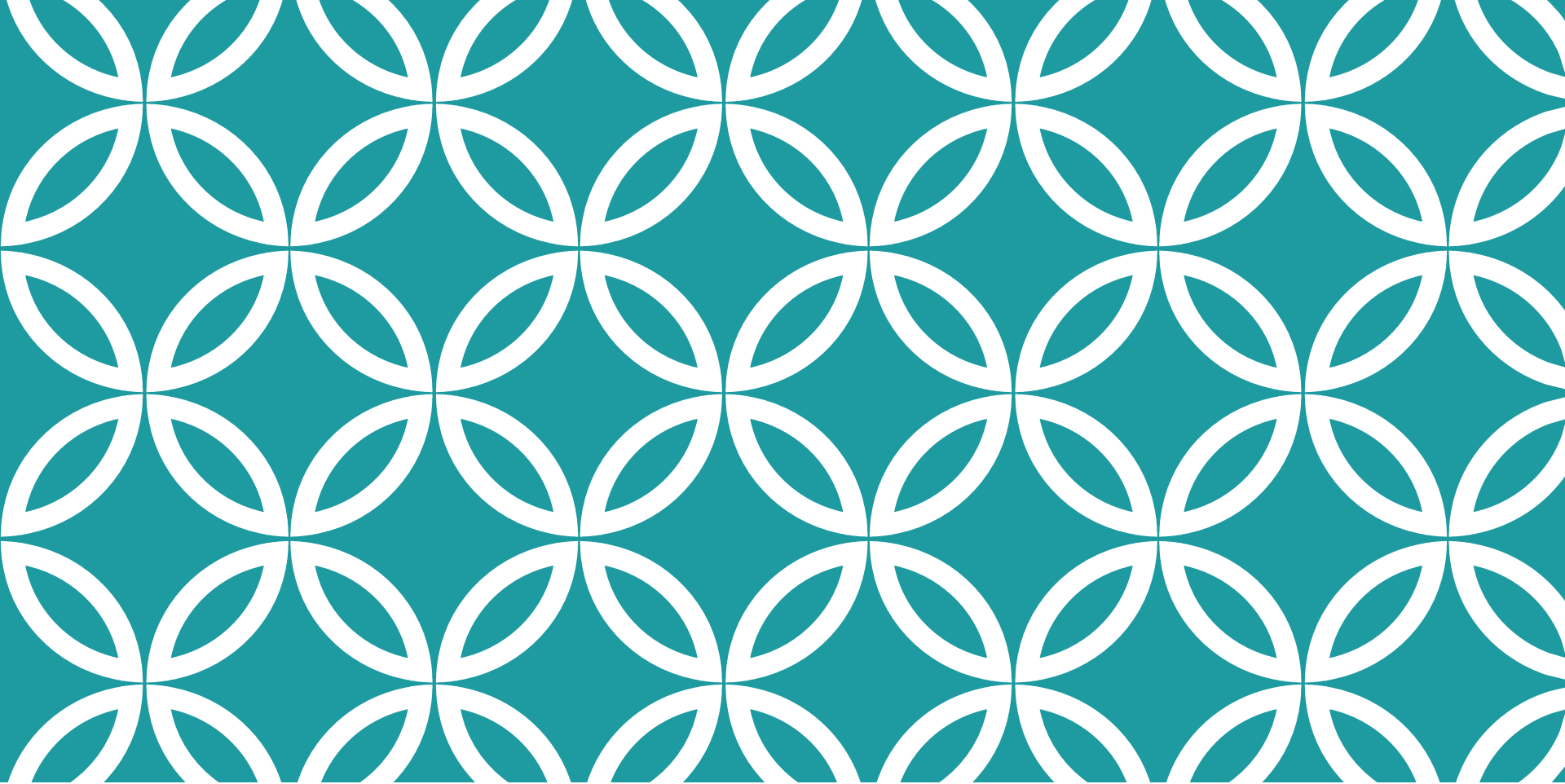
Q4) One of the individual's risk factors that lead to substance abuse is?

- A. peers pressure
- B. Maternal abuse
- C. ADHD
- D. parents- relationship

MCQs

Which of the following is NON NICOTINE REPLACEMENT THERAPY?

- A. chewing gum
- B. skin patches
- C. lozenges
- D. Bupropion



1. EPIDEMIOLOGY OF SMOKING IN SAUDI ARABIA .

2.RISKS OF SMOKING.

By: HUSSAM ALASHHAB

Smoking Facts “WHO”

- Over **1 billion** individuals have smoked tobacco .
- Males more than females .
- Responsible for **6 million** deaths yearly.
- It is recognized by the World Health Organization as the second leading risk factor for death worldwide.



EPIDEMIOLOGY

One of the latest studies in SAUDI ARABIA among adults aged 18 years or older in 2018 showed that:

The prevalence of cigarette smoking is **21%**.



gender	Categories	%percentage	Total
Male	Daily Smokers	26.29%	32.5%
	Nondaily Smokers	6.19%	
Female	Daily Smokers	1.59%	3.9%
	Nondaily Smokers	2.34%	



Risks of smoking

- Smoking is responsible for around **6 million** deaths yearly
- it affects variety of organs in the body and it causes many disease (COPD,IHD ,Stroke)
- **lung** is the most affected
- mortality in smokers is **3 times** greater than non smokers

Even if you only smoke one cigarette a day it can have serious health consequences

Risks from Smoking

Smoking can damage nearly every part of your body

Cancers	Chronic Diseases
	Stroke
	Blindness, cataracts, age-related macular degeneration
	Congenital defects—maternal smoking: orofacial clefts
Oropharynx	Periodontitis
Larynx	Aortic aneurysm, early abdominal aortic atherosclerosis in young adults
Esophagus	Coronary heart disease
	Pneumonia
Trachea, bronchus, and lung	Atherosclerotic peripheral vascular disease
Acute myeloid leukemia	Chronic obstructive pulmonary disease, tuberculosis, asthma, and other respiratory effects
Stomach	Diabetes
Liver	Reproductive effects in women (including reduced fertility)
Pancreas	Hip fractures
Kidney and ureter	Ectopic pregnancy
Cervix	Male sexual function—erectile dysfunction
Bladder	Rheumatoid arthritis
Colorectal	Immune function
	Overall diminished health

Smoking and Respiratory diseases

- Smoking is the most common cause of (COPD) one of the leading cause of death worldwide .
- causes most common cases of lung cancer.
- causes **90%** of lung cancer deaths.
- Smoking worsens conditions like asthma and URTI.



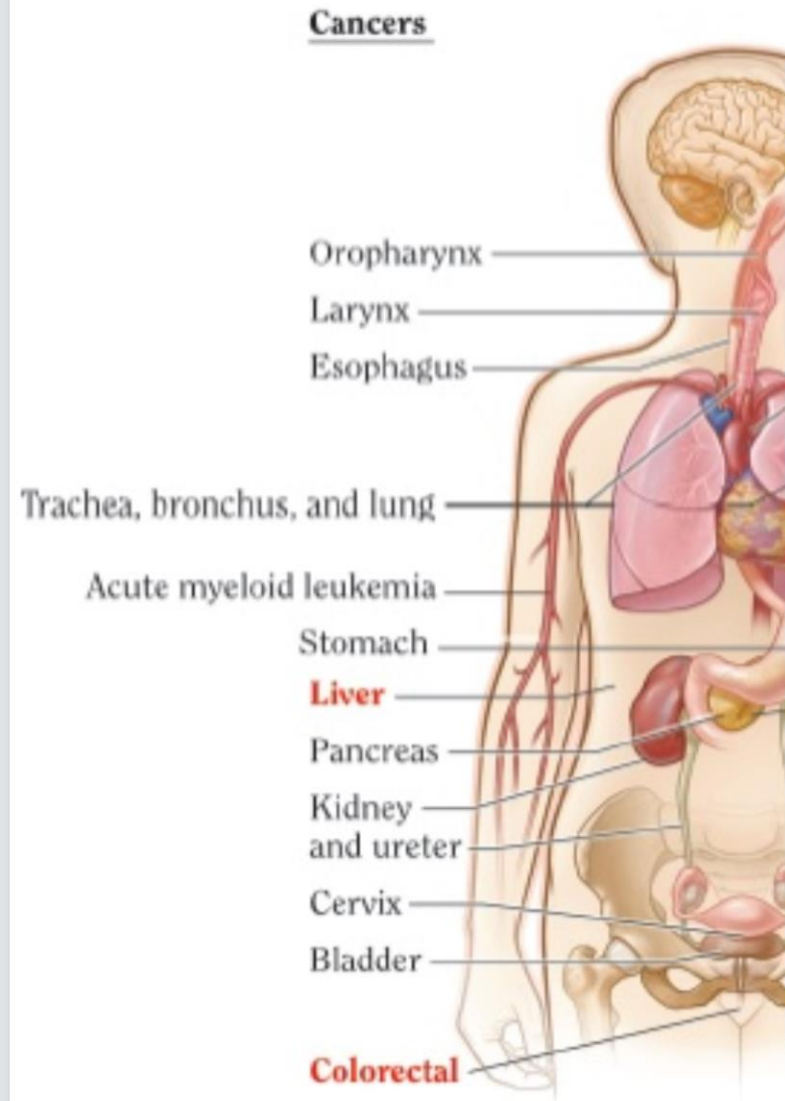
Smoking and Cardiovascular diseases

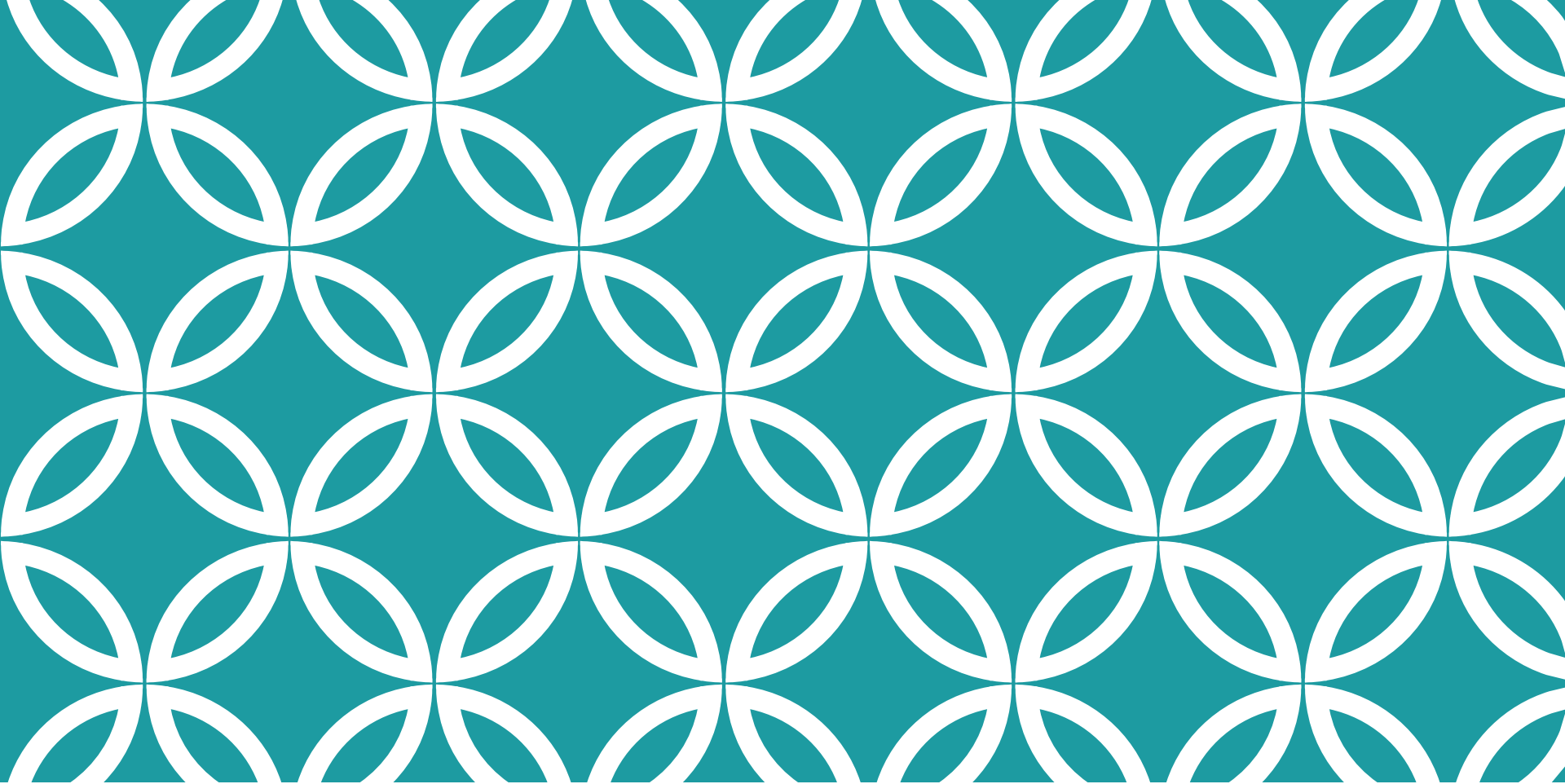
- Smoking results in narrowing in the blood vessels which **increase the risk of heart disease and stroke** .
- It is a major risk factor for **IHD** and peripheral arterial disease .
- It **decreases HDL** in the blood and **increases BP**



Smoking and Cancer

- Poisons in cigarette can weaken the body's immune system, making it harder to kill cancer cells. When this happens, cancer cells keep growing without being stopped .
- Lung cancer is now the leading cause of cancer death in the world.





3. APPRECIATE THE EFFECT OF OF PASSIVE
SMOKING....
4. HELP THE SMOKER TO QUIT...

By: ABDULAZIZ ALMOTAIRI.

SECONDHAND SMOKING

It is The Inhalation of smoke by person other than the active smoker. It harms children and adults.

Secondhand smoking causes the same health concerns as active smoking including cardiovascular disease, lung cancer and respiratory disease. Incidence is correlated with amount of exposure.



EFFECTS OF PASSIVE SMOKING ON PREGNANCY

Affects both mother and baby.

Toxins in secondhand smoke can cross the placenta and reach the fetus, affecting its blood circulation and oxygen supply leading to hypoxia and growth retardation, causing :

- 1) Higher risk for pre- term birth
- 2) Low birth weight and smaller head circumference.
- 3) Higher incidence of SIDS.
- 4) Learning or behavioral deficiencies in the child.

The Effects of Secondhand SMOKE

Secondhand smoke can worsen existing physical issues (eg, coronary artery or lung disease).

Months of repeated, prolonged exposure can cause negative health impacts.

Nicotine is detectable in the bloodstream within 30 minutes.

Passive smoking during pregnancy can contribute to:

- Low birthweight, poor lung function, ear infections, asthma and more.
- Sudden Infant Death Syndrome (SIDS) for infants under 1 year old.
- Abnormal or delayed growth and development.

Low Risk: (due to short timeframe and low intensity of exposure)

- Smoke from bonfires
- Spending an evening out at a casino
- Smelling smoke from a car next to you in traffic, walking by a smoker

UnityPoint Health

EFFECTS OF PASSIVE SMOKING ON CHILDREN

Children exposed to secondhand smoking during early life are at most risk for developing:

- 1) Respiratory symptoms (cough, wheezing, phlegm)
- 2) Lower respiratory infections (bronchitis, bronchiolitis, pneumonia).
- 3) Exacerbation of asthma. Incidence of asthma especially if early prenatal and postnatal exposure to smoke.
- 4) Ear infections.
- 5) Decreased lung growth.

Maternal smoking has greater effect than parental.

HOW TO MINIMIZE RISK OF PASSIVE SMOKING?

- Greater no-smoke laws in indoor places.
- Smoking outside home, car and workplace. (third hand smoking).
- Hand washing after cigarette use to reduce contact with toxic residues.
- Positive smoke-free role models for youth to reduce number of smokers in community.

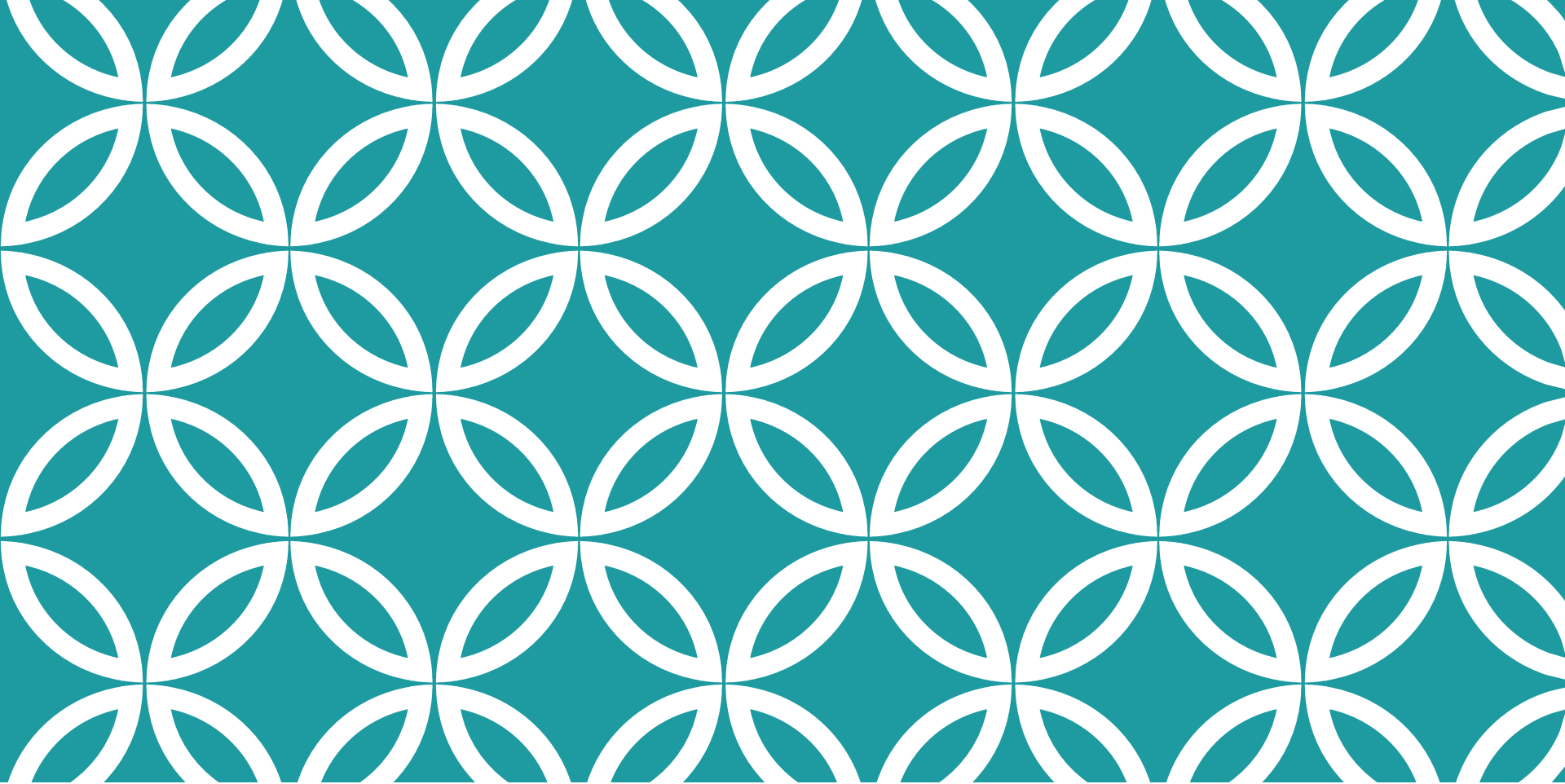


HELPING THE SMOKER TO QUIT

1. Cold turkey.
2. Behavioral therapy.
3. Nicotine replacement therapy.
4. Medication
5. Combo treatments



NICOTINE WITHDRAWAL



5.PHC PHYSICIAN ROLE.
6.SMOKING CESSATION MEDICATIONS.
7.FACTORS THAT LEAD TO SUBSTANCE ABUSE.

By: MAJED ALZHRANI
&
MOHAMMED ALGHAMDI

PHC PHYSICIAN ROLE:

PHC physician has an essential role in helping patients to quit smoking by:

- Opportunistic Health Promotion.
- educating the patient about smoking risks and benefits of cessation.
- Prescribing smoking cessation pharmacological tools.
- Explaining about each pharmacological tool's advantages, disadvantages, and contraindications.





برنامج مكافحة التدخين
Tobacco Control Program



وزارة الصحة
Ministry of Health

لحجز موعد بعيادات الإقلاع عن
التدخين بمختلف مناطق المملكة
اتصل على **937**

غلاف جديد لعبوات التبغ

تضع الهيئة العامة للغذاء والدواء اللامسات النهائية لإلزام شركات التبغ بالتغليف العادي لمنتجاتها

- تقليل جاذبية تغليف التبغ
- القضاء على الترويج لمنتجات التبغ
- الحد من التغليف المضلل للتبغ
- زيادة فعالية التحذيرات الصحية من التبغ

لماذا؟

• لا شعارات أو ألوان أو صور علامات تجارية أو معلومات ترويجية

• تغليف العلب من الخارج بأغلفة عادية اللون

• أسماء العلامات التجارية والنوع بلون وخط عاديين



• التحذيرات الصحية المصورة المستعملة مع التغليف العادي



sayed ahmed
@faqer_lah

وانا بدخن القرف ده وصلت لمرحلة أنهج
واتنفس بصعوبة من طلوع السلم اكر من
مرة او خمس دقائق لعب كورة، الكلام ده وانا
شاب 20 سنة مش ع المعاش يعني! دلوقتي
بعد 7 سنين من الانقطاع التام عن النيكوتين
بصحى الصبح أجري الـ ٤٠ دقيقة متواصل
زي السلام عليكم
انقذوا نفسكم من اكبر فخ في حياتكم.

للكل مدخن: لا تشيل هم

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PHARMACOLOGICAL MANAGEMENT:

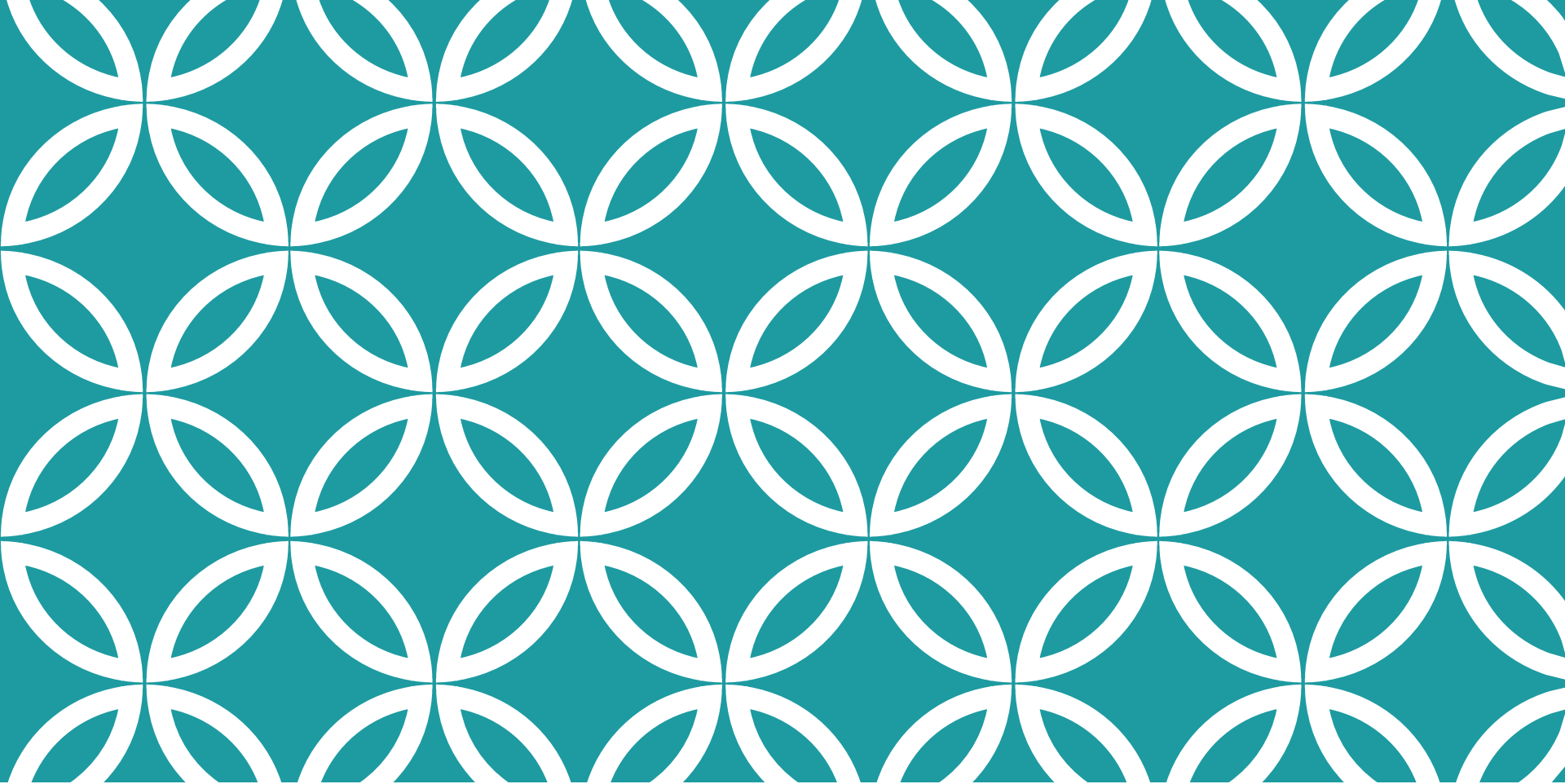
1- Nicotine Replacement Therapies (NRT).

2- Non NRT's.

→ bupropion

→ varenicline





NICOTINE REPLACEMENT THERAPEIS.



NICOTINE REPLACEMENT THERAPIES (NRT).

NRT can reduce the cravings and withdrawal symptoms you experience that may hinder your attempt to give up smoking. NRTs are designed to wean your body off cigarettes and supply you with a controlled dose of nicotine while sparing you from exposure to other chemicals found in tobacco.

The U.S Food and Drug Administration (FDA) approved five types of NRT:

- chewing gum
- skin patches
- lozenges
- intranasal spray (prescription only)
- inhaler (prescription only)

Contraindications for NRT'S :

- Hypersensitivity
- Smokers in postmyocardial infarction period
- Life-threatening arrhythmias
- Severe or worsening angina pectoris
- Nonsmokers.
- Pregnancy
- Hypertension

NICOTINE CHEWING GUM

Advantages: used to help people to stop smoking, it works by providing nicotine to your body to decrease the withdrawal symptoms experienced when smoking is stopped and as a substitute oral activity to reduce the urge to smoke.

Side effects:

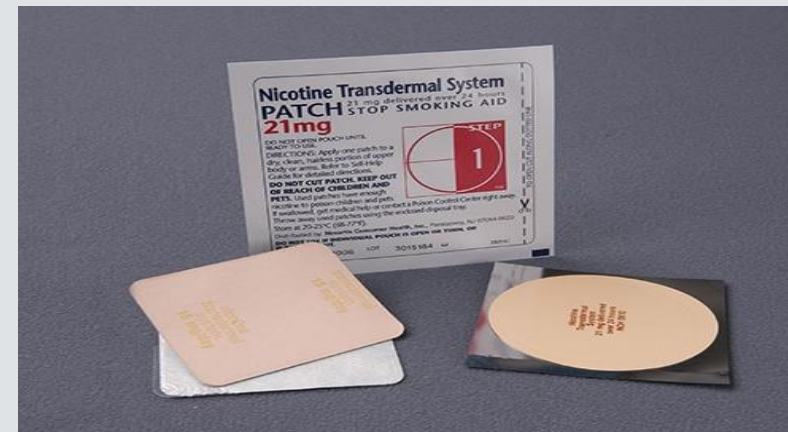
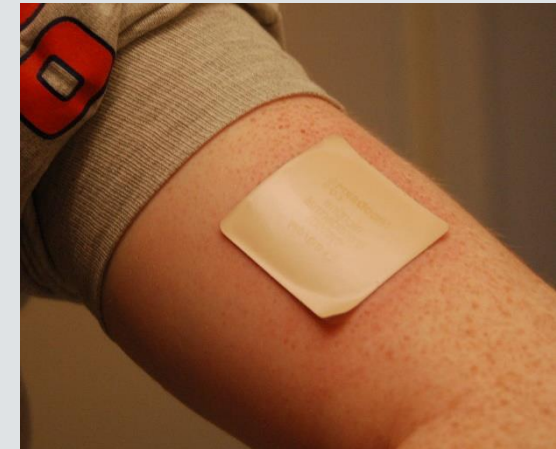
- Nausea / vomiting
- Dizziness
- Mouth / tooth or jaw problems.
- Diarrhea
- Weakness
- Rash
- Breathing difficulty
- Mouth blisters
- palpitation

- **Contraindicated in active temporomandibular joint disease.**



NICOTINE TRANSDERMAL PATCHES

- **Advantages:** used to help people stop smoking cigarettes. They provide a source of nicotine that reduces the withdrawal symptoms experienced when smoking is stopped.
- **Side effects:**
 - Nausea / vomiting.
 - Headache
 - Increased blood pressure
 - Acne
 - Anorexia
 - others.



NICOTINE LOZENGES

- **Side effects:**
- increased blood pressure
- Nausea / vomiting.
- Tachycardia
- Dizziness
- Insomnia



NICOTINE NASAL SPRAY

Advantages:

- Nicotine nasal spray is user-controlled dose and easy to use.
- This medication gets rid of symptoms faster than any other medication.

Disadvantages:

- Nicotine nasal sprays can be costly, and there is no generic form currently on the market.
- This medication requires a prescription

Side effects:

- Local irritation.
- CNS and psychological manifestations.
- Fatigue
- Weight gain
- sweating.



NICOTINE INHALERS

Advantages:

- It is easy to use.
- You can easily control the doses.
- Nicotine Inhaler works much more quickly than the nicotine gum.
- You can use it as per your requirement.
- If you use this according to the directions prescribed, then you can easily quit smoking.

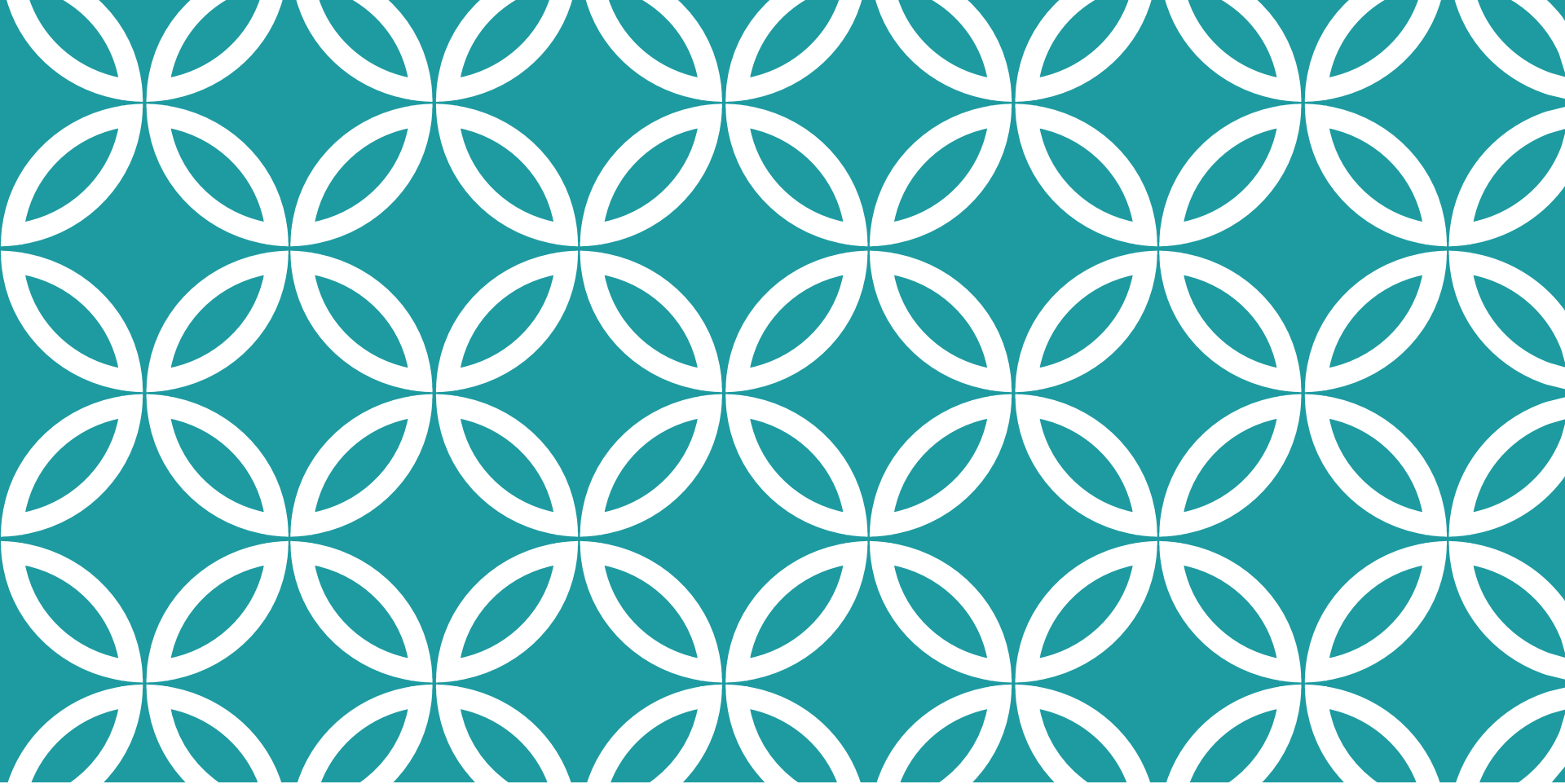
Disadvantages:

It is more expensive than nicotine gum.



Side effects:

- Mouth/throat irritation
- Nausea / vomiting
- Cough
- Headache
- Rhinitis
- Dyspepsia



NON NICOTINE REPLACEMENT THERAPY

BUPROPION (ZYBAN)

VARINECLINE (CHANTIX/CHAMPIX)



BUPROPION (ZYBAN)



It's a medication used as an antidepressant and a smoking cessation aid.

It is a norepinephrine-dopamine reuptake inhibitor (NDRI) and a nicotinic receptor antagonist.

Side effects:

- seizures
- dry mouth
- trouble in sleeping
- Agitation
- headaches

Contraindications:

- Epilepsy
- Alcohol / benzodiazepines users.
- Active brain tumors.
- Pregnancy/breast feeding
- Age under 18

Varinecline (Chantix/Champix)



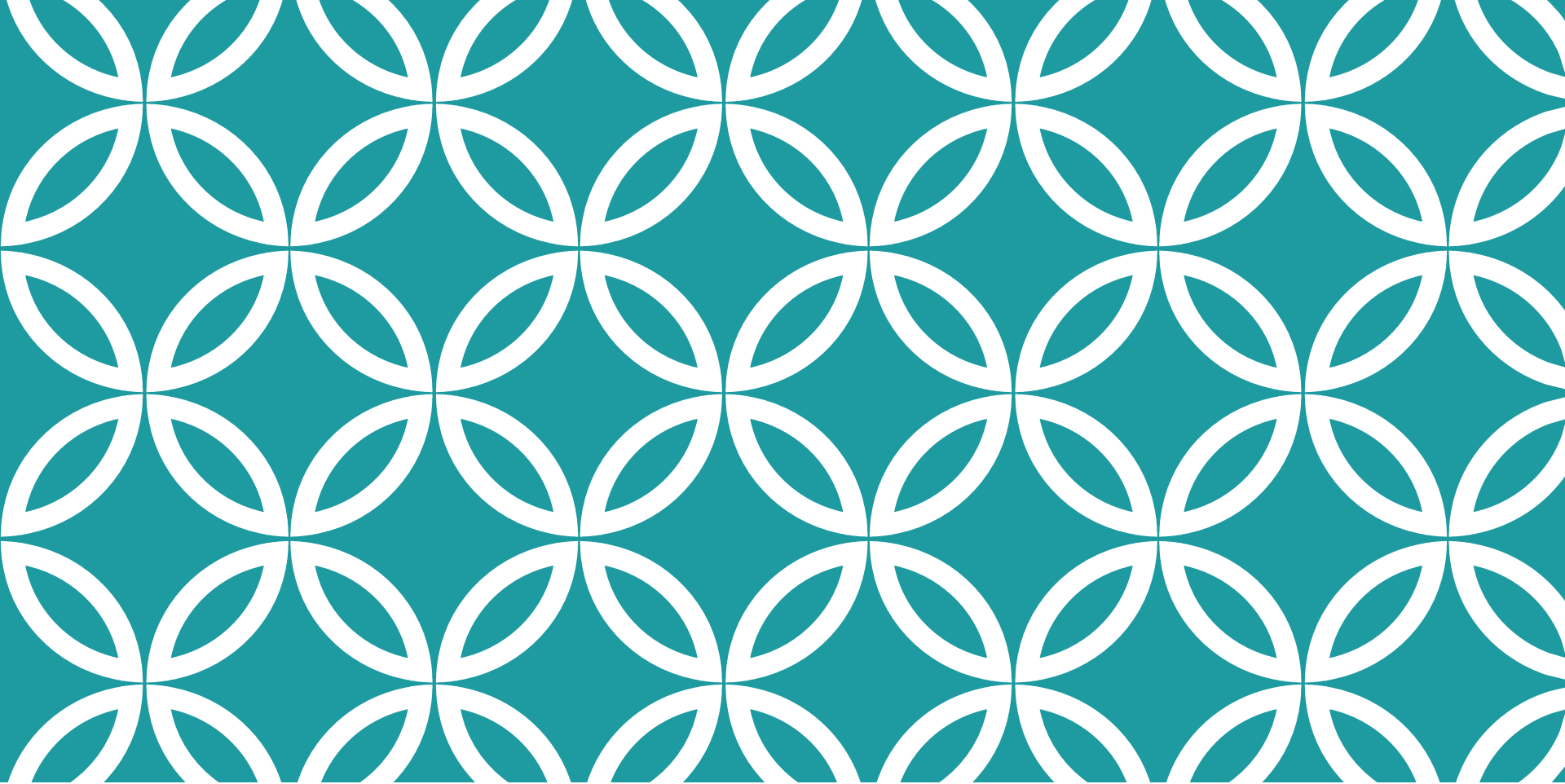
It's under smoking cessation aid class, used along with counseling and education to help people quit smoking. It works by blocking pleasant effect of nicotine (from smoking) on the brain.

Side effects:

- Nausea
- Headache
- Sleeping troubles
- nightmares.

Contraindications:

- pregnancy/ breast feeding.
- Age under 18.



SUBSTANCE ABUSE

- Definition of SUBSTANCE ABUSE.
- Factors that leads to substance abuse.

SUBSTANCE ABUSE.

Substance abuse, also known as drug abuse, is a patterned use of a drug in which the user consumes the substance in amounts or with methods which are harmful to themselves or others, and is a form of substance-related disorder.

Widely differing definitions of drug abuse are used in public health, medical and criminal justice contexts.

In addition to possible physical, social, and psychological harm, use of some drugs may also lead to criminal penalties, although these vary widely depending on the local jurisdiction



والان انتم اسمعوا لي
انا قد حظيت بيوم متعب جدا



FACTORS THAT LEADS TO SUBSTANCE ABUSE

INDIVIDUAL FACTORS

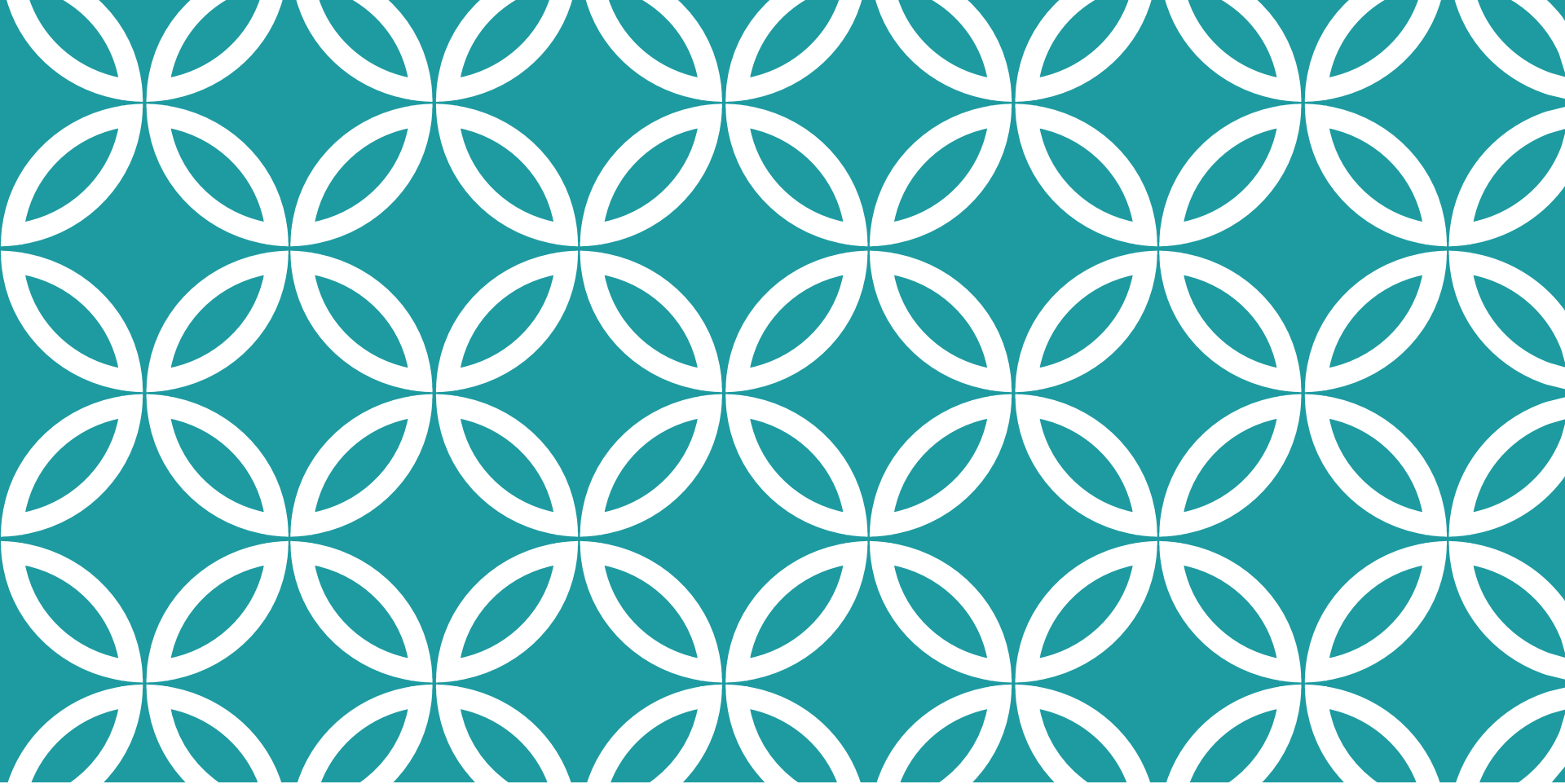
- Attention deficit disorder (ADHD).
- Anxiety and depression.

FAMILIAL FACTORS

- Childhood maltreatment (including abuse and neglect).
- Parental or familial substance abuse.
- Marital status of parents (divorced).
- level of parental education.
- Familial socioeconomic status.
- Parent-child relationships.
- Child perception that parents approve of their substance use.

ENVIROMENTAL/SOCIAL FACTORS

- Deviant Peer Relationships.
- Bullying.
- Gang Affiliation.
- Post-traumatic stress disorder (PTSD).



8. TYPES OF SUBSTANCE ABUSE
9. APPROACH SUBJECTS WITH SUBSTANCE
ABUSE

By: MESHAL ALAQIDI

1- Alcohol:

A colourless volatile flammable liquid which is produced by the natural fermentation of sugars and is the intoxicating constituent of wine, beer, spirits, and other drinks.

Side effects: Slurred speech, Drowsiness, Vomiting, Diarrhea, Upset stomach, Headaches, Breathing difficulties, Distorted vision and hearing, Impaired judgment, Decreased perception and coordination, Unconsciousness, Coma, Blackouts.

2- Central Nervous System Depressants:

Medications that slow brain activity, which makes them useful for treating anxiety and sleep problems. (Barbiturates, Benzodiazepines)

Side effects: Drowsiness, slurred speech, poor concentration, confusion, dizziness, problems with movement and memory, lowered blood pressure, slowed breathing

3- Cocaine:

A powerfully addictive stimulant drug made from the leaves of the coca plant native to South America.

Side effects: Narrowed blood vessels, enlarged pupils, increased body temperature, headache, abdominal pain and nausea, euphoria, increased energy, insomnia, restlessness, anxiety, violent behavior, panic attacks, paranoia, psychosis, heart attack, stroke, seizure, coma.

4- Heroin:

An opioid drug made from morphine, a natural substance extracted from seed pod of opium poppy plants.

Side effects: Euphoria, dry mouth, itching, nausea, vomiting, analgesia, slowed breathing and heart rate.

5- Marijuana (Cannabis):

Made from Cannabis sativa. The main psychoactive (mind-altering) chemical in marijuana is delta-9-tetrahydrocannabinol, or THC.

Side effects: Enhanced sensory perception and euphoria followed by drowsiness/relaxation, slowed reaction time, problems with balance and coordination, increased heart rate, problems with memory, anxiety

6- Opioids:

Pain relievers with an origin similar to that of heroin. Opioids can cause euphoria and are often used nonmedically, leading to overdose deaths.

Side effects: pain relief, drowsiness, nausea, constipation, euphoria, slowed breathing, death.

7- Inhalants:

Solvents, aerosols, and gases found in household products such as spray paints, markers, glues, and cleaning fluids; also nitrites (e.g., amyl nitrite), which are prescription medications for chest pain.

Side effects: Confusion, nausea, slurred speech, lack of coordination, euphoria, dizziness, lightheadedness, hallucinations/delusions, headaches, death from asphyxiation, suffocation, convulsions or seizures, coma, or choking

8-Amphetamine :

Amphetamine is a central nervous system stimulant that affects chemicals in the brain and nerves that contribute to hyperactivity and impulse control.

it is used to treat attention deficit hyperactivity disorder (ADHD).

Side effects: Agitation , anxiety , bladder pain , bloody urin , delusion , false sense of well-being , mental depression, etc.

APPROACHING SUBSTANCE ABUSE

Substance misuse screening:

Single-question screen:

“How many times in the past year have you used an illegal drug or used a prescription medication for nonmedical reasons?”

APPROACHING SUBSTANCE ABUSE

Substance abuse is characterized by the development of consequences from substance use, and these consequences can serve as motivators for change.

Principles and techniques derived from **motivational interviewing** can be used to manage resistance and increase readiness to change.

For patients with substance abuse, experts generally recommend advising abstinence

Cont.

For patients who are not committed to abstinence harm reduction strategies is an appropriate alternative .

Harm reduction strategies reduce the **negative health consequences** of substance use for example:

providing clean needles to persons who continue to inject drugs.

Avoid driving while intoxicated.

APPROACHING SUBSTANCE ABUSE

Substance dependence is a chronic relapsing and remitting illness, Patients require chronic care approach that can include:

Pharmacotherapy

Referral to specialty treatment

Mutual help meetings

Ongoing counseling and care coordination.

Engage family members in the treatment plan as family support is important in the recovery process.

Motivational interviewing

The aim of motivational interviewing is to empower and motivate individuals to take responsibility and change their substance use behavior.

Stage 1: Understanding why they need to change

Stage 2: Planning and making the changes

Stage 3: Maintaining the change



STAGE 1

Understanding why they need to change.

Help the person explore their desire to change.

Do they want to change?

Do they need to change?

What can the health-care provider do?

STAGE 1

Step 1: Give feedback about the person's personal risk or impairment (e.g. how is the substance use harming them/impacting on them and how it is harming others?).

•**Step 2:** Encourage them to take responsibility for their substance use choices.

•**Step 3:** Ask them about the reasons for their substance use.

•**Step 4:** Ask about both the perceived positive and negative consequences of their substance use.

STAGE 2

Planning and making changes Supports the person to make changes

Step 1: Ask them about their personal goals for their future. Support them to explore whether their substance use is helping them reach those goals or not?

Step 2: Discuss the reasons, consequences, benefits, harms and goals the person has so they gain a deeper understanding of how their substance use is impacting on them.

Step 3: Discuss realistic changes the person could make to change.

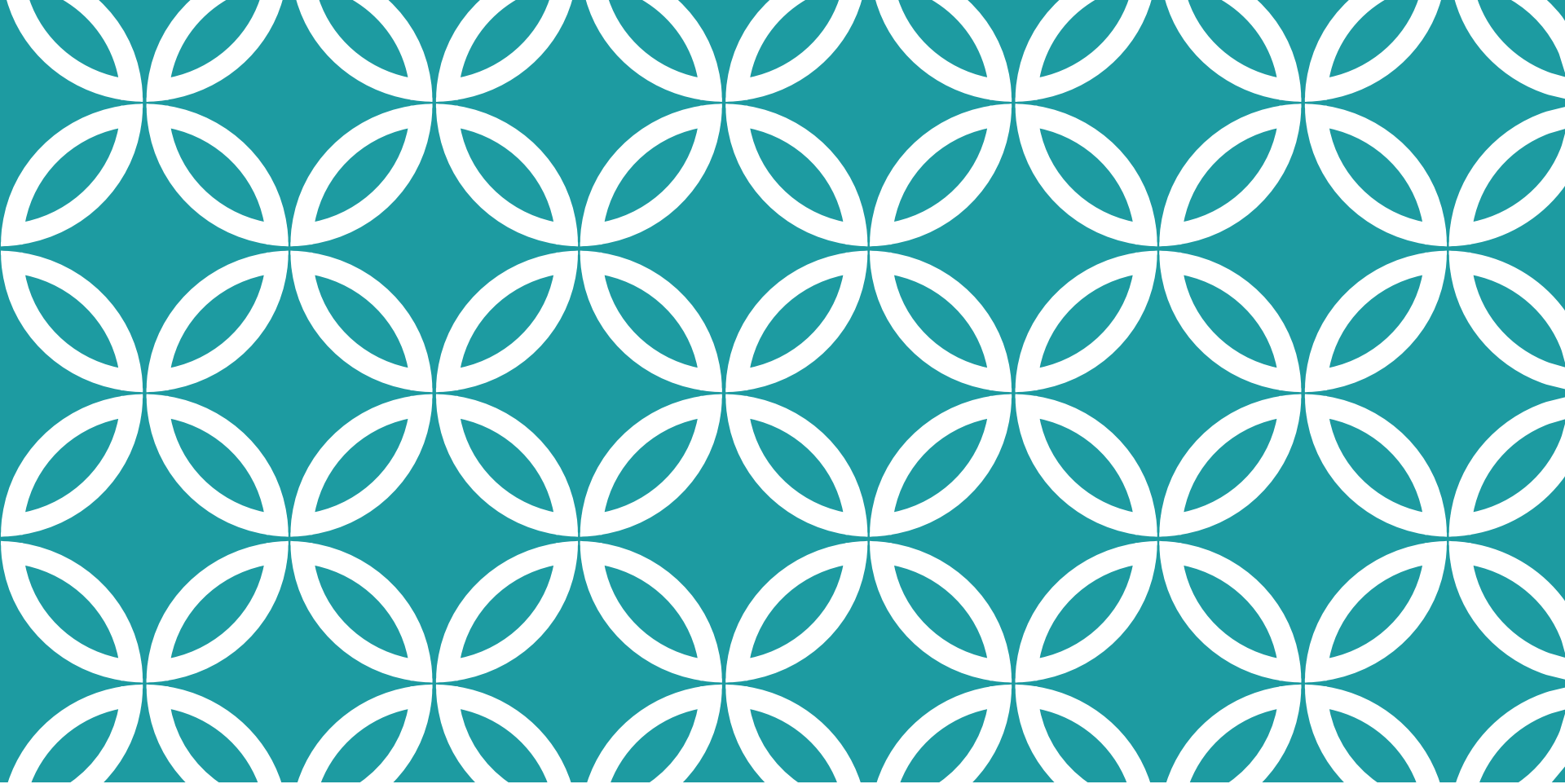
Step 4: Support them to enact that plan. Arrange a follow up session with them so you can see how that plan is going and make necessary changes to it if they have lapsed.



STAGE 3

Maintaining the change:

The person has achieved the change they want but it can be easy to lapse or relapse and start using old patterns of behavior.



THANK YOU

